



ZFW

Socket No.: 055071-0328

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Customer Number: 20277
Robert SOCHA, et al.	:	Confirmation Number: 2388
Application No.: 10/756,829	:	Group Art Unit: 2825
Filed: January 14, 2004	:	Examiner: Suresh Memula
For: METHOD OF OPTICAL PROXIMITY CORRECTION DESIGN FOR CONTACT HOLE MASK		

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

10/756,829

Please charge any shortage in fees due in connection with the filing of this paper,
including extension of time fees, to Deposit Account 500417 and please credit any excess fees to
such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Michael E. Fogarty
Registration No. 36,139

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 MEF:aem
Facsimile: 202.756.8087
Date: April 11, 2006

**Please recognize our Customer No. 20277
as our correspondence address.**



SHEET 1 OF 2

INFORMATION DISCLOSURE
CITATION IN AN
APPLICATION

(PTO-1449)

ATTY. DOCKET NO.
055071-0328SERIAL NO.
10/756,829APPLICANT
Robert John SOCHA, et al.FILING DATE
January 14, 2004GROUP
2825

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US 6,413,684 B1	07/02/2002	Stanton	
		US 6,355,382 B1	03/12/2002	Yasuzato et al.	
		US 5,229,230	07/20/1993	Kamon	
		US 5,895,741	04-20-1999	Hasegawa et al.	
		US 6,214,497 B1	04-10-2001	Stanton	
		US 2002/0152452 A1	10-17-2002	Socha	
		US 5,682,323	10-28-1997	Pasch et al.	
		US 6,303,253 B1	10-16-2001	Lu	
		US 6,223,139 B1	04-24-2001	Wong et al.	
		US 6,777,141	08-2004	Pierrat, Christophe	
		US 6,787,271	09-2004	Cote et al.	
		US 2002/0083410	06-2002	Wu et al.	
		US 6,792,591	09-2004	Shi et al.	
		US 6,519,760	02-2003	Shi et al.	
		US 2003/0228541	12-2003	Hsu et al.	
		US 2002/0157081	10-2002	Shi et al.	
		US 6,807,662	10-2004	Toublan et al.	
		US 2004/0122636	06-2004	Adam, Konstantinos	

FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Codes-Number & -Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Figures Appear	Translation	
						Yes	No

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

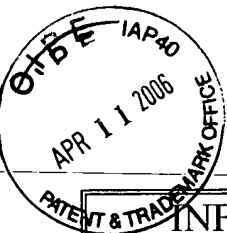
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.



SHEET 2 OF 2

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)				ATTY. DOCKET NO. 055071-0328		SERIAL NO. 10/756,829	
				APPLICANT Robert John SOCHA, et al.			
				FILING DATE January 14, 2004		GROUP 2825	
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US					
		US					
		US					
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Codes-Number + -Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Figures Appear	Translation Yes No	
		WO 02/03140 A1	01/10/2002	NUMERICAL TECHNOLOGIES, INC.		x	
		EP 1 237 046 A2	09/04/2002	ASML MASKTOOLS B.V.		x	
		EP 1 202 119 A1	05-02-2002	ASML Masktools B.V.		x	
		WO 03/054626 A1	07-03-2003	ADVANCED MICRO DEVICES, INC.		x	
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
		Christoph DOLAINSKY, et al., "Simulation based method for sidelobe suppression," Optical Microlithography XIII, Proceedings of SPIE, 2000, pp 1156-1162, Vol. 4000					
		Kyoji NAKAJO, et al., "Auxiliary pattern generation to cancel unexpected images at sidelobe overlap regions in attenuated phase-shift masks,"					
		Nicolas Bailey COBB, "Fast Optical and Process Proximity Correction Algorithms for Integrated Circuit Manufacturing," Ph.D. dissertation, Spring 1998, pp 35-72, University of California at Berkeley					
		J. Fung CHEN, et al., "Practical I-Line OPC Contact Masks for Sub-0.3Micron Design Rule Application: Part 1—OPC Design Optimization," pp 181-201					
		J.A. TORRES, et al., "Contrast-Based Assist Feature Optimization," Optical Microlithography XV, 2002, pp 179-187, Proceedings of SPIE, Vol 4691, SPIE					
		Olivier TOUBLAN, et al., "Fully Automatic Side Lobe Detection and Correction Technique for Attenuated Phase Shift Masks," Optical Microlithography XIV, 2001, pp 1541-1547, Proceedings of SPIE, Vol. 4346, SPIE					
		Michael S. YEUNG, "Extension of the Hopkins theory of partially coherent imaging to include thin-film interference effects," Optical/Laser Microlithography VI, 1993, pp 452-463, SPIE, Vol. 1927					
		Douglas VAN DEN BROEKE, et al., "Near 0.3 k, Full Pitch Range Contact Hole Patterning Using Chromeless Phase Lithography (CPL)," Proceedings of the SPIE, September 9, 2003, pp 297-308, Vol. 5256, SPIE					
EXAMINER				DATE CONSIDERED			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.